



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,385	02/10/2004	Thomas Heinke	004-7:FSN 0738 US	3911

30080 7590 11/15/2005

LAW OFFICE OF CHARLES E. KRUEGER
P.O. BOX 5607
WALNUT CREEK, CA 94596-1607

EXAMINER

RATCLIFFE, LUKE D

ART UNIT PAPER NUMBER

3662

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/776,385	Applicant(s) HEINKE ET AL.	
	Examiner Luke D. Ratcliffe	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

4

DETAILED ACTION

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

The drawings are objected to because from page 6-8 of the specification the circle ROM is misnumbered as number 44 rather than 95a, also the correct reference to number 44 is never made in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as

Art Unit: 3662

either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **1, 3, 6, and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (5133605) in view of Suzuki (JP02245624).

Referring to **claim 1**, Nakamura shows a system for indicating the location of an energy zone on an object surface with a video subsystem (figure 4), and an optical overlay system (figure 7 Ref 62), but does not show a range finder sub-system.

Suzuki shows a range finder sub-system that is incorporated in a system for indicating the location of an energy zone on an object surface but does not show a video sub-system or an optical overlay sub-system. It would have been obvious to modify Nakamura to include the range finding apparatus because this would allow the device of Nakamura to determine with more accuracy what the energy zone is and be able to overlay a shape outline on the energy zone.

Referring to **claim 3**, it would be obvious with the introduction of the range finding system to Nakamura to have the first axis substantially coincident with the optical axis of the IR optical system so that the laser beam indicates the center of the energy zone.

Referring to **claim 6 and 8**, Nakamura shows a method and a system for indicating the location of an energy zone on an object surface including acquiring an digital image of the object surface (figure 4 and column 1-3), displaying a digital image of the object surface (figure 4 and column 1-3), forming a geometric shape indicating the portion of the object surface indicating the portion of the surface included in the energy zone (figure 7 Ref 62 and column 1-3) and overlaying the geometrical shape over the digital image (figure 7 Ref 62 and column 1-3) but does not show a means for measuring the distance to the object.

Suzuki shows a means for measuring the distance to the object surface but does not shows indicating the location of an energy zone on an object surface including acquiring an digital image of the object surface, displaying a digital image of the object surface, forming a geometric shape indicating the portion of the object surface indicating the portion of the surface included in the energy zone, and overlaying the geometrical shape over the digital image. It would have been obvious to modify Nakamura to include the range finding apparatus because this would allow the device of Nakamura to determine with more accuracy what the energy zone is and be able to overlay a shape outline on the energy zone.

Art Unit: 3662

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (5133605) in view of Suzuki (JP02245624) as applied to claim 1 above, and further in view of Reifer (5742379).

The combination of Nakamura and Suzuki does not show using a laser diode for emitting a laser-beam and a position-sensitive photodiode with a major surface that is displaced from the first optical axis.

Reifer shows using a laser diode for emitting a laser-beam and a position-sensitive photodiode with a major surface that is displaced from the first optical axis. It would have been obvious to further modify Nakamura to include the laser diode and the photodiode taught by Reifer because these are very common with the implementation of a range finder and has no new or unexpected results.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (5133605) in view of Suzuki (JP02245624) as applied to claim 1 above, and further in view of Akutsu (4739560).

The combination of Nakamura and Suzuki does show an image controller (Nakamura column 2 lines 25-55) but does not show a storage device for storing circle data utilized to form circle images of different diameters.

Akutsu shows a storage device for storing circle data utilized to form circle images of different diameters (column 9 lines 48-53) but not an image controller. It would have been obvious to further modify Nakamura to include the storage device taught by Akutsu because this allows for faster response time of the apparatus rather

Art Unit: 3662

than calculating the correct diameter of the circle every time, the circle diameter is recalled from memory.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (5133605) in view of Suzuki (JP02245624) as applied to claim 1 above, and further in view of Everest (4494881).

The combination of Nakamura and Suzuki does not show a shape outline being a circle. Everest shows a shape outline being a circle. It would have been obvious to further modify Nakamura to show the outline of the energy to be a circle because this is a common shape of an energy zone to be in and can easily describe to the user where the energy zone is.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (5133605) in view of Suzuki (JP02245624) as applied to claims 1 and 8 above, and further in view of Hosoe (3856399).

The combination of Nakamura and Suzuki does not show a compensating or parallax between two images. Hosoe shows a compensating for parallax between two images (column 7). It would have been obvious to further modify Nakamura to include the parallax compensation taught by Hosoe because this allows for the two different systems to be able to view the same scene even though their optical axis is not the same.

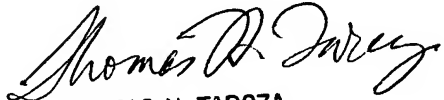
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke D. Ratcliffe whose telephone number is 571-272-3110. The examiner can normally be reached on 8:00-4:30 M-F.

Art Unit: 3662

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LDR


THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600